IN THE CLAIMS

Please amend the claims as follows:

1-10 (Canceled)

11 (Currently Amended): A radio access network system for transferring user data in a radio access network, comprising:

a base station configured to receive an IP packet including the user data from a mobile station via a radio channel in the radio access network; and

a control apparatus configured to control the base station, wherein,

the mobile station is configured to transmit a transfer path setting request, for requesting to set a transfer path of the user data, to a core network via the radio access network, and

the control apparatus includes,

a receiving unit configured to receive a transfer path assignment request for requesting to assign the transfer path of the user data, from the core network,

a transfer path setting unit configured to set the transfer path of the user data, in accordance with the transfer path assignment request,

a priority setting unit configured to set an IP priority for the transfer path such that IP packet data transmitted from the base station along the transfer path to the control apparatus is processed according to the IP priority set for the transfer path by the transfer path setting unit, and

a transmitting unit configured to transmit, to the base station, a radio channel setting request for requesting to set the radio channel, the radio channel setting request including the IP priority set by the priority setting unit,

wherein the base station sets a priority for the IP packet including the user data based to the IP priority set by the priority setting unit and transfers the IP packet including the user data to the core network according to the IP priority,

the control apparatus includes a priority determination table for associating a traffic class with the IP priority, the priority determination table determines DCP and ToS priority of IP packets based on a traffic class regarding a Radio Access Bearer, and traffic classed as conversational or streaming, which belongs to real-time traffic requiring real-time communication, is set to have a higher priority than traffic classed as interactive or background, which belongs to a non real-time traffic that does not require real-time communication, and

the priority setting unit is configured to set the IP priority by referring to the priority determination table.

12 (Currently Amended): The radio access network system according to Claim 11, wherein:

the transfer path setting request includes a traffic class showing a type of the user data; and

the transfer path assignment request includes the traffic class~~; and~~

~~the priority setting unit is configured to set the IP priority in accordance with the traffic class~~.

13-14 (Canceled).

15 (Previously Presented): The radio access network system according to Claim 11, wherein:

the base station comprises a packet processing unit configured to regenerate an IP data packet, based on the user data received from the mobile station; and

the packet processing unit is configured to add the IP priority to a predetermined field in the IP data packet.

16 (Previously Presented): The radio access network system according to Claim 15, wherein the predetermined field comprises:

a field for defining a priority of the data packet by a common format used in a plurality of networks, or

a field for defining a priority of the data packet by a format used in a predetermined network only.

17 (Previously Presented): The radio access network system according to Claim 15, wherein the predetermined field is a field for defining any of delay characteristics of the IP data packet, throughput of the IP data packet, reliability of the IP data packet or cost of the IP data packet.

18-19 (Canceled).

20 (Currently Amended): A radio access method for transferring user data in a radio access network comprising a base station configured to communicate the user data with a mobile station via a radio channel, and a control apparatus configured to control the base station, the method comprising:

receiving, at the base station, IP packet including the user data from the mobile station via the radio channel in the radio access network;

transmitting, at the mobile station, a transfer path setting request for requesting to set a transfer path of the user data, to a core network via the radio access network;

receiving, at the control apparatus, a transfer path assignment request for requesting to assign the transfer path of the user data, from the core network;

storing, at the control apparatus, a priority determination table for associating a traffic class with an IP priority, the priority determination table determines DCP and ToS priority of IP packets based on a traffic class regarding a Radio Access Bearer, and traffic classed as conversational or streaming, which belongs to real-time traffic requiring real-time communication, is set to have a higher priority than traffic classed as interactive or background, which belongs to a non real-time traffic that does not require real-time communication,

setting, at the control apparatus, the transfer path of the user data, in accordance with the transfer path assignment request;

setting, at the control apparatus, [[an]] the IP priority for the transfer path such that IP packet data transmitted from the base station along the transfer path to the control apparatus is processed according to the IP priority, wherein the IP priority is set by referring to the priority determination table;

transmitting, at the control apparatus, to the base station, a radio channel setting request for requesting to set the radio channel, the radio channel setting request including the IP priority;

setting, at the base station, a priority for the IP packet including the user data based on the IP priority; and

transferring, at the base station, to the core network, the IP packet including the user data to the core network according to the IP priority.

21 (Currently Amended): The method according to Claim 20, wherein

the transfer path setting request includes a traffic class showing a type of the user data, and

the transfer path assignment request includes the traffic class~~, and~~

~~the priority is set in accordance with the traffic class~~.

22 (Canceled).

23 (Currently Amended). The radio access network system according to Claim [[18]] 15, wherein the base station is configured to store the IP data packet into one of a plurality of RAN-side priority transmission queues according to the IP priority set for the IP data packet, and the base station includes a RAN-side processing unit configured to transmit IP data packets stored in a high-priority queue at a rate higher than IP data packets stored in a low priority queue.

24 (Currently Amended). The radio access network system according to Claim [[19]] 15, wherein the control apparatus is configured to store the IP data packet into one of a plurality of core-side priority transmission queues according to the IP priority set for the IP data packet, and the control apparatus includes a core-side processing unit configured to transmit IP data packets stored in a high-priority queue at a rate higher than IP data packets stored in a low priority queue.